

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	2	"6175551".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/09/22 17:11
L2	15517	ofdm (orthogonal adj frequency adj division)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/09/22 17:11
L3	111	contiguous same 2	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/09/22 17:12
L4	26	non-contiguous same 2	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/09/22 17:12

US-PAT-NO: 6598200  
DOCUMENT- US 6598200 B1  
IDENTIFIER:  
TITLE: Method and apparatus for frequency domain data  
frame transmission

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**Brief Summary Text - BSTX (10):**

The use of OFDM provides flexibility to fit into non-uniform and non-contiguous frequency allocations, while maintaining reasonable spectral efficiency. This results from the intrinsic nature of OFDM which is composed of a large number of simultaneously transmitted sub-carriers which are staggered in frequency each individually occupying a low bandwidth, as illustrated in FIG. 2. The scheme's flexibility comes about from the ability of designate which sub-carriers are to be activated and which are not. Regarding spectral efficiency, the signal composition results in an intrinsic spectrum fall-off outside of the active bandwidth commensurate with the bandwidth of each sub-carrier rather than with the total spectrum width. Thus relatively low excess bandwidths can be achieved.

**Brief Summary Text - BSTX (12):**

A further difficulty of transmission over certain media in more than one frequency band is frequency selective fading, particularly if the frequency bands are non-contiguous. An OFDM transmission system is again suited to such systems because of the possibility for adaptively selecting which portions of the frequency spectrum are to be used, enabling the avoidance not only of mutual interference but also of areas of poor transmission capability in the frequency spectrum which may arise from time to time due to frequency selective fading.

DOCUMENT-  
IDENTIFIER:

US 20020019214 A1

TITLE:

Method and apparatus for adaptively setting frequency channels in a multi-point wireless networking system

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**Detail Description Paragraph - DETX (12):**

[0029] In order to provide continuous coverage, the scanning receiver of each of the wireless devices continuously monitors the spectrum at each location. Furthermore, a set of quality parameters may be monitored to verify ongoing communications through existing communications links and the quality of service of the existing links. The quality parameters may include the bit error rate (BER), correlation time, block errors, for example, if data are exchanged through the bidirectional communications links using well known modulation schemes, such as orthogonal frequency division multiplex or spread spectrum, to customize a set of subcarriers or band segments and place them in contiguous or non-contiguous spectrum slots, to allow the communications links to utilize the available bandwidths efficiently and to enhance the signal-to-noise ratios of the receivers. The increased bandwidth efficiency and signal noise ratio would in turn provide an increase in usable data throughput of the communications links. In an embodiment, the quality parameters for verifying the ongoing communications between the wireless devices and the quality of service are exchanged as link level data between the devices.